Claims 2-21 have been canceled and claims 33-400 have been added. Support for these new claims can be found throughout the specification. Particularly, support for independent claims 33, 49, 65, 81, 97, 113, 129, 145, 161, 177, 193, 209, 225, 241, 257, 273, 289, 305, 321, 337, 342, 347, 352, 357, 368, 379, and 390 can be found, for example, at page 9, first full paragraph, page 10, second last full paragraph to page 11, page 21, first full paragraph, page 27, second full paragraph, and originally filed claim 20. Additionally, these independent claims are related to claims 1-15 of Issued Patent No. 5,932,540.

Moreover, support for representative claim 35 can be found, for example, at page 11, last full paragraph that extends to page 12. Support for representative claim 36 can be found, for example, at page 41, last full paragraph. Support for representative claim 37 can be found, for example, at page 27, first full paragraph. Support for representative claims 38-48 can be found, for example, at page 27, last full paragraph, to page 28, and are related to claims 61-185 of Issued Patent No. 5,932,540.

Thus, no new matter has been added by way of the amendment.

Applicants also wish to bring to the attention of the Examiner U.S. Patent Nos. 5,935,820 and 6,040,157, and copending applications Serial Nos. 09/257,918, 09/219,442, 09/107,997, and 09/438,538 which are all related family members.

I. Amendment of the Specification.

The specification has been amended to correct an obvious typographical error. 5x SSC is a well-known solution used in hybridization solutions. (*See*, e.g., Exhibit A, CURRENT PROTOCOLS IN MOLECULAR BIOLOGY, John Wiley and Sons, N.Y., at page 2.10.7 (1989).) SSC is normally made as a 20x stock solution, and then diluted accordingly for a particular use. Exhibit B shows that a 20x SSC stock solution contains 3 M NaCl and 0.3 M trisodium citrate. (*See*, e.g., Exhibit B, CURRENT PROTOCOLS, at page A.2.5.) To make a 5x SSC solution, the 20x solution must be diluted by a factor of four. Therefore, a 5x SSC solution contains 750 mM NaCl (3 M ÷ 4 = 750 mM) and 75 mM trisodium citrate (0.3 M ÷ 4 = 75 mM). One skilled in the art would have immediately recognized that the amount of ingredients listed in the specification for a 5x SSC solution was incorrect. Rather than describing a 5x SSC solution, made up of 750 mM NaCl and 75 mM trisodium citrate, the specification inaccurately listed the ingredient amounts for a 1x solution. The skilled artisan, in recognizing the typographical error, could have easily adjusted the amount of ingredients described in the specification to properly make a 5x SSC solution.

Therefore, because no new matter will be added to the specification if these typographical errors are corrected, Applicants respectfully request that the amendments to the specification to recite the correct ingredient amounts in 5x SSC be entered.

II. ATCC Deposit

To demonstrate full compliance with 37 C.F.R. §§ 1.803-1.809 and to satisfy the requirement of 35 U.S.C. § 112, first paragraph, Applicants assure the Examiner that ATCC Deposit No. 97149 and 75698 has been deposited under the terms of the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure with the following International Depository Authority: American Type Culture Collection (ATCC), 10801 University Blvd., Manassas, Virginia 20110-2209, USA. The deposit comprise a recombinant nucleic acid vector into which cDNA sequences encoding Vascular Endothelial Growth Factor 2 (VEGF-2) have been inserted. The deposit was made on May 12, 1995 and March 4, 1994, as disclosed on page 8, lines 1-11 of the instant application.

In accordance with MPEP § 2410.01 and 37 C.F.R. § 1.808, assurance is hereby given that all restrictions on the availability to the public of the above nucleic acid molecules encoding human VEGF-2, will be irrevocably removed upon the grant of a patent based on the captioned application, and that the deposit will be replaced if viable samples cannot be dispensed by the ATCC, except as permitted under 37 C.F.R. § 1.808(b).

III. The Restriction Requirement.

The Examiner has required an election under 35 U.S.C. § 121 of one of Groups I-XII. In response, Applicants provisionally elect, *with traverse*, Group II represented by new claims 33-400 for further prosecution. Applicants reserve the right to file one or more divisional applications directed to non-elected inventions should the restriction requirement be made final.

Applicants respectfully traverse the restriction requirement as it applies to Groups I and III-XII. As the Examiner points out, polynucleotides, polypeptides, antibodies, etc. are patentably distinct inventions. However, even where two patentably distinct inventions appear in a single application, restriction remains improper unless it can be shown that the search and examination of both groups would entail a "serious burden". *See*, M.P.E.P. § 803.

In the present situation, no such showing has been made. Indeed, no arguments have been made explaining why it would impose an undue burden to examine Groups I-XII together.

Applicants submit that a search of the polypeptide claims would provide useful information for Groups I and III-XII. For example, in many if not most publications, where a published polypeptide sequence, the authors also routinely include a description of the polynucleotides and antibodies. Thus, the searches for polypeptides, polynucleotides, and antibodies, etc. commonly overlap and therefore, the search and examination of a polypeptide sequence, and remaining groups would not entail a serious burden. The searches for Groups I-XII would be overlapping.

Additionally, applicants note that new claims 38-48, 54-64, 70-80, 86-96, 102-112, 118-128, 134-144, 150-160, 166-176, 182-192, 198-208, 214-224, 230-240, 246-256, 262-272, 278-288, 294-304, 310-320, 326-336, 362-367, 373-378, 384-389, and 395-400 would likely fall within Group VI. However, these method claims are related to the claims of Group II as between a product and a process for using the product. Further, these method claims include all the limitations of the product of claims to which they depend. In light of the decisions in In re Ochiai, 71 F.3d 1565, 37 USPQ2d 1127 (Fed. Cir. 1995) and In re Brouwer, 77 F.3d 422, 37 USPQ 2d 1663 (Fed. Cir. 1996), a notice was published in the Official Gazette which set forth new guidelines for the treatment of product and process claims. See 1184 OG 86 (March 26, 1996). Specifically, the notice states that "in the case of an elected product claim, rejoinder will be permitted when a product claim is found allowable and the withdrawn process claim depends from or otherwise includes all the limitations of an allowed product claim." Id. Accordingly, Applicants respectfully request that if any of the product claims are found allowable, then the process claims of 38-48, 54-64, 70-80, 86-96, 102-112, 118-128, 134-144, 150-160, 166-176, 182-192, 198-208, 214-224, 230-240, 246-256, 262-272, 278-288, 294-304, 310-320, 326-336, 362-367, 373-378, 384-389, and 395-400 be rejoined and examined for patentability.

Accordingly, as applied to Groups I-XII, the restriction requirement should be withdrawn.

Conclusion

In view of the foregoing remarks, Applicants believe they have fully addressed the Examiner's concerns and that this application is now in condition for allowance. An early notice to that effect is urged. A request is made to the Examiner to call the undersigned at the phone number provided below if any further action by Applicants would expedite allowance of this application.

If there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

Dated: July 18, 2000

Michele M. Wales (Reg. No. 43,975)
Attorney for Applicants

Human Genome Sciences, Inc.
9410 Key West Avenue
Rockville, MD 20850
Telephone: (301) 610-5772

Enclosure

MMW/lcc